## REMARKS

In the Office Action dated December 14, 2005, claims 1-45 are pending and are rejected.

This Response addresses each of the Examiner's rejections and objections. Applicants therefore respectfully submit that the present application is in condition for allowance. Favorable consideration of all pending claims is therefore respectfully requested.

Claims 20 and 22 are rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite. Specifically, the Examiner objects to the use of trademarks in claim 20.

Applicants have amended claim 20 by replacing the trademarks with the generic description of the relevant membranes, as found on page 17 of the specification. Withdrawal of the rejection under 35 U.S.C. §112, second paragraph, is respectfully requested.

Claims 1-2, 4-8, 10-19, 21-28, 32-38 and 44-45 are rejected on the ground of non-statutory obviousness-type double patenting, as allegedly unpatentable over claims 1-2, 24-35, 37-38, 41, 45 and 47 of U.S. Patent 6,872,316.

Applicants acknowledge that the non-statutory obviousness-type double patenting can be overcome by filing a terminal disclaimer. Applicants intend to file a terminal disclaimer once the claims are found otherwise allowable.

Claims 1, 3-7, 9-26, 32, 33, 39, 41, 44 and 45 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent 5,869,297.

Applicants first direct the Examiner's attention to the fact that independent claim 1 has been amended to include a step of subjecting the nanofiltration permeate to a crystallization process and recovering the crystals of the desired product. Support for this amendment is found on page 16, lines 14 to 20 of the specification. Applicants respectfully submit that it is a unique

recognition of the present invention that the removal of crystallization inhibitors by nanofiltration leads to improved crystallization of the desired product.

Turning to the '297 patent, Applicants respectfully submit that this reference discloses a process for nanofiltering a feed stream containing dextrose (glucose) and di- and tri-oligomers thereof to produce a nanofiltration retentate, which is rich in the higher molecular weight compounds (di- and tri-oligomers), and a nanofiltration permeate of substantially pure dextrose. However, the reference does not teach crystallization of dextrose (a monosaccharide sugar) or the recovery of the crystalline dextrose. Furthermore, the reference does not recognize anywhere that crystallization inhibitors are removed by nanofiltration prior to the crystallization. To the contrary, the reference aims to employ a non-crystallization process to provide a high purity dextrose stream. See column 2, lines 9 to 11 of the '297 patent.

Therefore, Applicants respectfully submit that the '297 patent does not teach each and every element of the presently claimed invention. The absence from the reference of any claimed element negates anticipation. Kloster Speedsteel AB v Crucible Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986). Withdrawal of the §102(b) rejection based on the '297 patent is respectfully requested.

Claims 2, 8, 27-31, 34-38, 40 and 42 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent 5,869,297, in view of certain alleged admissions in the specification with respect to the background art.

The Examiner contends that claims 2, 8 and 34-38 differ from the '297 patent in that these claims further define xylose as the reducing sugar and are directed to a process for separation of xylose. The Examiner states that the '297 patent teaches that reducing monosaccharides can be separated from higher molecular weight sugars, as well as dimmers and

trimers thereof, by employing nanofiltration. It is the Examiner's opinion that the process of the '297 patent would be expected to operate for separating xylose from its dimmers and trimers, because xylose has a similar molecular weight to those sugars disclosed in the '297 patent. Furthermore, the Examiner indicates that as admitted in the specification, it is known to obtain a xylose feed stream from the chromatographic separation using a column packed with cation and anion exchange resins in monovalent or divalent metal form of spent sulphite liquor and the mother liquor from the crystallization of xylose. Therefore, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to employ the xylose feeds for separation of xylose, as presently claimed.

As submitted above, the '297 patent does not teach crystallization of dextrose (a monosaccharide sugar) or the recovery of the crystalline dextrose. To the contrary, the reference aims to employ a non-crystallization process to provide a high purity dextrose stream. See column 2, lines 9 to 11 of the '297 patent. Notably, there is no recognition in the '297 patent that crystallization inhibitors can be removed by nanofiltration. Therefore, the '297 patent could not have provided any motivation to those skilled in the art to perform nanofiltration prior to crystallization.

Therefore, Applicants respectfully submit that the '297 patent does not render the presently claimed processes obvious. Withdrawal of the §103 rejection based on the '297 patent is respectfully requested.

Claims 1, 3-7, 10-23, 33, 35 and 43-45 are rejected under 35 U.S.C. §102(a) or 102(e) as allegedly anticipated by U.S. 6,406,546.

Applicants observe that the '546 patent discloses a nanofiltration process for separating sucrose from invert sugar (dextrose and fructose) to produce a retentate of higher

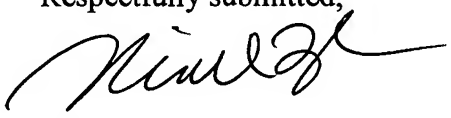
molecular weight sugars (sucrose) and a permeate rich in fructose. Claim 2 of the '546 patent recites crystallization of sucrose (a disaccharide sugar), which is recovered in the nanofiltration retentate. Applicants respectfully submit that the product to be recovered and crystallized (i.e., sucrose) is recovered in the nanofiltration retenate in the '546 patent, contrary to the present invention, where the product to be crystallized is recovered in the nanofiltration permeate.

In addition, the presently claimed processes are directed to crystallization of a monosaccharide sugar or sugar alcohol and removal of crystallization inhibitors from a monosaccharide sugar or sugar alcohol by nanofiltration before crystallization. Applicants respectfully submit that the '546 patent merely discloses the crystallization of a disaccharide sugar, i.e., sucrose. The '546 patent does not disclose anywhere crystallization of a monosaccharide sugar or removal of crystallization inhibitors from a monosaccharide sugar.

Therefore, Applicants respectfully submit that the '297 patent does not teach each and every element of the presently claimed invention. Therefore, the anticipation rejection under §102(b) based on the '546 patent is overcome, and withdrawal thereof is respectfully requested.

In view of the foregoing amendments and remarks, it is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



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